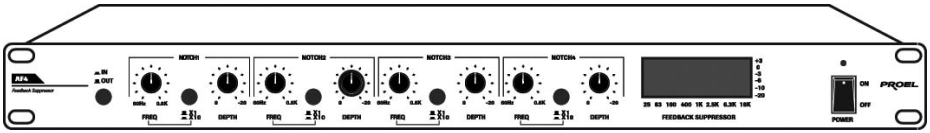
USER'S MANUAL

FEEDBACK SUPPRESSOR
AF4



PROEL

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1. IMPORTANT SAFETY INSTRUCTIONS

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CAUTION: To reduce the risk of electric shock do not remove cover (or back panel). No user serviceable parts inside. Refer servicing to qualified personnel only.

WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

This symbol is intended to alert the user of the presence of uninsulated dangerous voltage within the product enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user of the presence of important operating and maintenance (servicing) instruction in the literature accompanying the appliance. Please carefully read the owner's manual.

INSTRUCTIONS:

All safety and operating instructions should be read before the product is operated.

Retain these instructions:
All safety and operating instructions should be retained for future reference.
This owner's manual should be considered as a part of the product and it must accompany it every time, and delivered to the new user when this product is sold. In this way the new owner will be aware of all the installations, operating and safety instructions.

Heed all warnings:
All warnings on the product and in owner's manual should be adhered to**.**
Heed all warnings.

Follow all instructions:
All operating and user's instructions must be followed.

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Sentences preceded by ⚠ symbol contain important safety instruction. Please read it carefully.

DETAILED SAFETY INSTRUCTIONS.

Water and moisture:

This apparatus should not be used near water (i.e. bathtub, kitchen sink, swimming pools, etc.)

Ventilation:

This apparatus should be placed in position that doesn't interfere with correct ventilation. This unit, for example, should not be placed on a bed, sofa cover o similar surfaces that could cover ventilation openings, or placed in a built-in installation, such a bookcase or a cabinet that could block air flow trough ventilation openings.

Heat:

This apparatus should be placed away from heat sources, like radiators, heat registers, stoves or other products (including amplifiers) that produce heat.

Power sources:

- This apparatus should be connected only to power source type specified in this owner's manual or on the unit.
- If the supplied AC power cable plug is different from wall socket, please contact an electrician to change the AC power plug.

Grounding or Polarization:

- All precautions must be observed in order to avoid grounding or polarization defeating.
- Unit metal parts are grounded through the AC power cord.
- If the AC power outlet doesn't have grounding, consult an electrician for outlet grounding.

Power cord protection:

The power cord should be routed in a way it will not be walked on or pinched by items placed upon or against it, paying particular attention to cords at plugs, convenience receptacles and wall outlet.

Cleaning:

- You can clean the unit with a compressed air flow or a wet cloth.
- Don't clean the unit using solvents like trichloroethylene, thinners, alcohol, or other fluids with very strong volatility and flammability.

Non use periods:

The unit AC power cord should be unplugged from the outlet if it's unused for a long period.

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Objects or liquid entry inside the unit:

Be careful that no objects fall or liquid is spilled inside the unit through ventilation openings.

Safe power line use:

- Keep firmly the plug and the wall outlet while disconnecting the unit from AC power.
- If you're not going to use the unit for a long period of time, please unplug the power cord from AC power outlet.
- To avoid unit power cord damaging, please don't strain the AC power cable and don't bundle it.
- In order to avoid unit power cord damaging, please be sure that the power cord is not walked on or pinched by heavy objects.

Unit relocation:

Before any unit relocation please control the unit is turned off. The power cord must be unplugged by the wall outlet, and all the connections wires should be disconnected as well.

Don't open this unit:

Don't attempt to open or to repair this unit by yourself. For any problem solution not described in this owner's manual, please refer to qualified personnel only or consult us or your National Distributor. Any improper operation could result in fire or electric shock.

Damages requiring services:

- Don't attempt to do operations not described in this user's manual.
- In the following cases please refer to an authorized maintenance center or skilled personnel:
  - When the unit works improperly or it doesn't work at all.
  - If power cord or plug are damaged.
  - If liquid has spilled, or objects have fallen into the unit.
  - The unit has been exposed to rain.
  - The unit doesn't operate normally o it exhibits a marked change in performance.
  - If the product has dropped or it has been damaged in any way.

Maintenance:

The user shouldn't attempt maintenance operation not described in this user's manual. Every maintenance operation should be done by qualified personnel only.

IMPORTANT SAFETY INSTRUCTIONS:

- Install this unit following owner's manual instructions.
- Don't install, connect or disconnect power supply when the unit is powered, otherwise there's an high risk of electric shock.
- Don't open the unit, there are no user serviceable parts inside.
- If you detect a particular smell from the unit, please turn it off immediately and disconnect the AC power cord.
- Don't block the unit ventilation openings.
- Avoid using this unit in overload for a long period.
- Don't force commands (switches, controls, etc.)

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- To obtain good speakers wire contacts, please tighten the screw terminals firmly.
- ⚠ For safety reason, don't defeat the grounding connection. Grounding is useful for user safety.
- Use only connectors and accessories suggested by the manufacturer. .
- This unit should be placed in a rack (see INSTALLATION) and kept far from:
  - Wet places
  - Direct exposure to heat sources (like sun light)
  - Non properly ventilated places
- Disconnect the power cord during storms or when the unit is not used.

- ⚠ In order to prevent fire and electric shock risks, it's necessary to keep the unit far from sprinkling and drops. Please don't put cups, vases or other object containing liquids over the unit. In case of interferences from source signal, THD value will raise over 10%. Don't place this unit in a bookshelf o in other places with small room.
- PROEL S.P.A. is not responsible for any damage that occurs due to a wrong unit installation.

Thank you for choosing one of Proel products, and for your confidence towards our brand, synonymous of professionalism, accuracy, high quality and reliability. All our products are CE approved and designed for continuous use in professional installation systems.

Description

This unit has been specifically designed to eliminate feedback that may incur in a PA system.

FEATURES

- Advanced design and manufacturing accuracy
- Very easy installation
- Four independent NOTCH filters
- Frequency cut controls
- Frequency/level LED indicator
- Filter bypass master switch
- 24V DC emergency power

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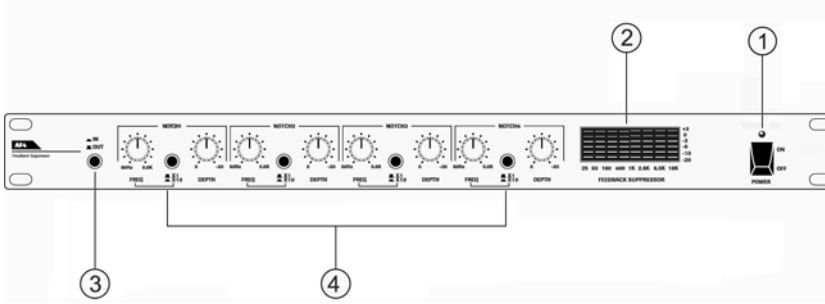
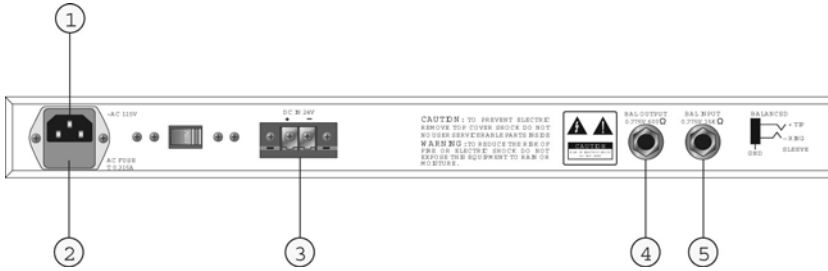
Front panel description



1. POWER switch and LED
2. Frequency/level LED indicator
3. Filter bypass master switch
4. Frequency and filter attenuation settings

Rear panel description



1. IEC standard AC power supply socket
2. Fuse-holder
3. 24V DC emergency power supply terminals
4. Balanced 6.3mm (1/4”) output jack connector
5. Balanced 6.3mm (1/4”) input jack connector

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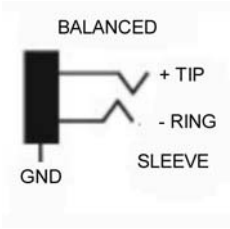
Installation

1. AC power supply connection.
   To connect this unit to AC power supply please use supplied linecord.

1. Input connection
   The input connector (fig.2 ref.5) is a balanced 6.3mm (1/4") jack connector. This connector accepts line level sound sources, like tuner, CD player, tape recorder, etc. Please refer to following picture for wiring.



2. Output connection
   The output connector (fig.2 ref.4) is a balanced 6.3mm (1/4") jack connector. This connector may be used to connect other units, like sound processors or amplifiers.

3. Emergency power
   By using the rear panel terminals (fig.2 ref.3) this unit can be connected to 24V DC power supply, allowing use during black-out. DC power supply can be supplied by an external generator or a battery (24V) able to supply 0,5 A at least.

4. Frequency/level LED indicator
   Using this display (fig.1 rif.2) it's possible to check the signal behaviour. In this way it's easier to control feedback or noises generating frequencies.

5. Filters adjustment controls
   The unit has four filters, for each filter there are two knobs and one switch. In order to choose the desired frequency (60Hz ~ 6KHz) use FREQ knob in conjunction with its multiplication switch (x1, x10). You can set each frequency attenuation using the DEPTH knob.

6. Filter bypass master switch
   In case you desire to deactivate or to control unit filters operation, it's possible to simultaneously deactivate all the filters pressing the switch (fig.1 ref.3) to its OUT position. To make filters active again press again the switch, IN.

Operations

a. To turn on the unit press the POWER switch ON, its led is lit.
b. To turn off the unit press the POWER switch OFF, its led too will be off as well.
c. In order to do an accurate frequency setting, please use the unit front panel frequency/level LED indicator.
d. To activate/de-activate all NOTCH filters use the IN/OUT switch (fig.1 ref.3).
e. In order to modify attenuation frequency, please use FREQ knob and x1 x10 switch, the choose the attenuation use DEPTH knob (fig.1 ref.4).

⚠ **Warning:** In order to avoid forthcoming units damage, please before connecting any sound source to this unit, control that its volume is totally lowered.

Technical Specifications

Model	**AF4**
Input connector	Balanced 6.3mm (1/4") jack
Output connector	Balanced 6.3mm (1/4") jack
Frequency response	20Hz~20KHz > -1dB
Signal/noise ratio	< 68dB
Input sensitivity/impedance	0.775V (0dBm)/15KΩ
Output level/impedance	0.775V (0dBm)/600Ω
NOTCH filters frequency range	60Hz~6KHz
Filter attenuation	0 ~ -20dB
Power consumption	5.5 W
Power requirements	AC 110~120 / 220~230V – 50/60Hz DC 24V
Rack dimension	1U 19" standard
Dimensions WxHxD	483x44x210 (mm.) – 19in. x 1.75in. x 8.2in.
Weight	3 Kg – 6.8lbs

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The product is in compliance with Directive 89/336/EEC (Electromagnetic Compatibility) and following modifications 92/31/EEC and 93/68/EEC, as the following standards:
EN 50082-1:1997, EN 55013:1990, EN 55020:1994

it is also in compliance with Directive 73/23/EEC (Low Voltage) and following modifications 93/68/EEC, as the following standard:
EN 60065:1998

Proel SpA pursue a policy of continuous research and development. Proel SpA reserve the right to modify product circuitry and appearance at any moment, without prior notice.

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